



**PATENT**  
Attorney Docket No. A-59941-3/RFT/THR  
Dorsey File No. 467084-66

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

*In re* application of:

ST. GEME, III et al.

U.S. Serial No.: 10/645,655

Filing Date: August 20, 2003

For: *HAEMOPHILUS ADHERENCE  
AND PENETRATION PROTEINS*

Examiner: To Be Assigned

Art Unit: To Be Assigned

CERTIFICATE OF MAILING

I hereby certify that this correspondence, including listed enclosures, is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450 on March 3, 2004.

Signed: \_\_\_\_\_

*Joyce Abriam*  
Joyce Abriam

**INFORMATION DISCLOSURE STATEMENT AND  
STATEMENT OF RELATEDNESS**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In satisfaction of the duty of disclosure under 37 C.F.R. § 1.56, and in accordance with the provisions of 37 C.F.R. §§ 1.97 and 1.98, Applicants wish to draw the attention of the U.S. Patent and Trademark Office to the references cited on the accompanying form PTO/SB/8A-B. Since copies of the references were provided either by the Applicant or the Examiner in the following related U.S. Applications: Serial No. 09/839,996, filed April 20, 2001 (now U.S. Patent No. 6,642,371), and Serial No. 08/296,791, filed August 25, 1994 (now U.S. Patent No. 6,245, 337), upon which the instant application relies for its priority date, in accordance with 37 C.F.R. § 1.98(d), no copies of these references are enclosed.

U.S. Serial No.: 10/645,655  
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None of the foregoing references is believed to disclose the invention as claimed.

Nothing herein shall constitute an admission concerning the contents of any of the cited references, nor shall the inclusion of a reference herein be considered an admission that the reference constitutes prior art against the invention claimed in the above-identified application.

Submission of the present document shall not be construed as an admission that a search has been made or that better art does not exist.

As far as is known to the undersigned, this Information Disclosure Statement is being filed within three months of the filing date of a national application, within three months of the date of entry of the national state in an international application, or before the mailing date of a first Office Action on the merits as set forth in 37 C.F.R. § 1.97(b), and therefore no fee is required.

While no fee is believed to be due, if this belief is in error the Commissioner is authorized to charge any additional fees, including extension fees or other relief which may be required, or credit any overpayment to Deposit Account No. 50-2319 (Our Order No. 467084-66 [A-59941-3/RFT/THR]).

Please direct any calls in connection with this application to the undersigned at (415) 544-7024.

Respectfully submitted,  
DORSEY & WHITNEY LLP

Dated: March 3, 2004  
Dorsey & Whitney LLP  
Intellectual Property Department  
Four Embarcadero Center, Suite 3400  
San Francisco, CA 94111-4187  
Telephone: (415) 544-7024  
Facsimile: (415) 398-3249

BY: Traci H. Ropp  
Traci H. Ropp, Reg. No. 44,307 for  
Richard F. Trecartin, Reg. No. 31,801  
*Filed under 37 C.F.R. §1.34(a)*  
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Approved for use through 10/31/2002. OMB 0651-0031

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Substitute for form 1449A/PTO (Modified)			<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			Application Number	<b>10/645,655</b>	
			Filing Date	<b>August 20, 2003</b>	
			First Named Inventor	<b>Joseph W. St. Geme III</b>	
			Group Art Unit	<b>Not yet assigned</b>	
			Examiner Name	<b>Not yet assigned</b>	
Sheet	<b>2</b>	of	<b>3</b>	Attorney Docket Number	<b>A-59941-3/RFT/THR</b>

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	†
	C1	BAKALETZ, L.O., et al., "Frequency of Fimbriation of nontypable <i>Haemophilus influenzae</i> and Its Ability To Adhere to Chinchilla and Human Respiratory Epithelium", <i>Infection and Immunity</i> , 1988, 56(2): 331-335.	
	C2	BARENKAMP, S.J., et al., "Cloning Expression, and DNA Sequence Analysis of Genes Encoding Nontypeable <i>Haemophilus influenzae</i> High-Molecular-Weight Surface-Exposed Proteins Related to Filamentous Hemagglutinin of <i>Bordetella pertussis</i> ", <i>Infection and Immunity</i> , 1992, 60(4):1302-1313.	
	C3	BENZ, I., et al., "AIDA-I, the adhesin involved in diffuse adherence of the diarrhoeagenic <i>Escherichia coli</i> strain 2787 (0126:H27), is synthesized via a precursor molecule", <i>Molecular Microbiology</i> , 1992, 6(11):1539-1546.	
	C4	BRENNAN, M.J., et al., "Identification of a 69-Kilodalton Nonfimbrial Protein As an Agglutinin of <i>Bordetella pertussis</i> ", <i>Infection and Immunity</i> , 1988, 56(12):3189-3195.	
	C5	CHARLES, I.G., et al., "Molecular cloning and characterization of protective outer membrane protein p. 69 from <i>Bordetella pertussis</i> ", <i>Proc. Natl. Acad. Sci. USA</i> , 1989, pp. 86:3554-3558.	
	C6	EWANOWICH, C.A., et al., "Invasion of HeLa 229 Cells by Virulent <i>Bordetella pertussis</i> ", <i>Infection and Immunity</i> , 1989, 57(9):2698-2704.	
	C7	FORSQREN, J., et al., "Haemophilus influenzae Resides and Multiplies Intracellularly in Human Adenoid Tissue as Demonstrated by In Situ Hybridization and Bacterial Viability Assay", <i>Infection and Immunity</i> , 62(2):673-679, (1994).	
	C8	GULIG et al., "Immunogenic Proteins in Cell-Free Culture Supernatants of <i>Haemophilus influenzae</i> Type b," <i>Infection &amp; Immunity</i> 44:41-48, 1984.	
	C9	ISBERG, R.R., et al., "Identification of Invasin: A Protein That Allows Enteric Bacteria to Penetrate Cultured Mammalian Cells", <i>Cell</i> , 60:769-778, (1987).	
	C10	KOOMEY, J.M., et al., "Nucleotide Sequence Homology Between the Immunoglobulin A1 Protease Genes of <i>Neisseria gonorrhoeae</i> , <i>Neisseria meningitidis</i> , and <i>Haemophilus influenzae</i> ", <i>Infection and Immunity</i> , 1984, 43(1):101-107.	
	C11	KRIVAN, H.C., et al., "Many pulmonary pathogenic bacteria bind specifically to the carbohydrate sequence GalNAc.β.1-4Gal found in some glycolipids", <i>Proc. Natl. Acad. Sci. USA</i> , 1988, 85:6157-6161.	
	C12	LEININGER, E., et al., "Pertactin, an Arg-Gly-Asp-containing <i>Bordetella pertussis</i> surface protein that promotes adherence of mammalian cells", <i>Proc. Natl. Acad. Sci. USA</i> , 1991, 88:345-349.	
	C13	LEININGER, E., et al., "Comparative Roles of the Arg-Gly-Asp Sequence Present in the <i>Bordetella pertussis</i> Adhesins Pertactin and Filamentous Hemagglutinin", <i>Infection and Immunity</i> , 1992, 60(6):2380-2385.	
	C14	PICHICHERO, M.E., "Do Pili Play A Role In Pathogenicity of <i>Haemophilus Influenzae</i> Type B", <i>The Lancet</i> , 1982, 56(2) 960-962.	
	C15	POHLNER, J., et al., "Gene Structure and extracellular secretion of <i>Neisseria gonorrhoeae</i> IgA protease", <i>Nature</i> , 1987, 325(29):458-462.	
	C16	POULSEN, K., et al., "Cloning and Sequencing of the Immunoglobulin A1 Protease Gene (iga) of <i>Haemophilus influenzae</i> Serotype b", <i>Infection and Immunity</i> , 1989, 57(10):3097-3105.	
	C17	POULSEN, K., et al., "A Comparative Genetic Study of Serologically Distinct <i>Haemophilus influenzae</i> Type 1 Immunoglobulin A1 Proteases", <i>Journal of Bacteriology</i> , 1992, 174(9):2913-2921.	
	C18	PROVENCE, D.L., et al., "Isolation and Characterization of a Gene Involved in Hemagglutination by an Avian Pathogenic <i>Escherichia coli</i> Strain", <i>Infection and Immunity</i> , 1994, 62(4):1369-1380.	

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